FPC 10W/13W Series

10”/13” Widescreen Multi-functional Touch Panel PC

Quick Reference Guide

2nd Ed – 03 June, 2009

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Part No. E20170W03A1R

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1. Getting Started

1.1 Safety Precautions

Warning!

Always completely disconnect the power cord from your chassis whenever you work with the hardware. Do not make connections while the power is on. Sensitive electronic components can be damaged by sudden power surges. Only experienced electronics personnel should open the PC chassis.

Caution!

Always ground yourself to remove any static charge before touching the CPU card. Modern electronic devices are very sensitive to static electric charges. As a safety precaution, use a grounding wrist strap at all times. Place all electronic components in a static-dissipative surface or static-shielded bag when they are not in the chassis.

1.2 Packing List

- 1 x FPC 10W or 13W Series Panel PC
- 1 x Quick Reference Guide
- 1 x CD/DVD-ROM contains the followings:
  - User's Manual (this manual in PDF file)
  - Ethernet driver and utilities
  - VGA drivers and utilities
  - Audio drivers and utilities
  - WiFi drivers and utilities
  - Touch controller drivers and utilities
- 1 x Power Adapter
- 4 screws for HDD (for barebone)

If any of the above items is damaged or missing, contact your retailer.

1.3 System Specifications

Panel			
	FPC-10W01	FPC-10W03	FPC-10W04
LCD size	10" Wide		
Display type	WSVGA TFT		
Resolution	1024x600		
Color	256K		
Pixel pitch	0.21525mm(W) x 0.21525mm(H)		
Luminance	250 cd/m²		
Contrast ratio	500		
Viewing angle	50(U), 60(D), 70(L), 70(R)		
Response time	25 ms		
Backlight	LED		
Touch Type	5-wire resistive		
Touch Light Transmission	80%		
Touch Interface	USB		
System			
Board	ECM-945GM	ECM-910	ECM-945GSE
CPU	Supports 65nm Intel® µFC-PGA 478 / µFC-BGA 479 Core™ Duo / Core™ 2 Duo / Celeron® M	Onboard Intel® Celeron M 600MHz with 512K L2 Cache or Intel® µFC-PGA 478 / µFC-BGA 479 Celeron® M CPU	Intel® Atom processor N270 1.6GHz CPU
Cooling Method	Active CPU cooler	Passive CPU heatsink	Passive CPU heatsink
System Chipset	Intel®82945GME GMCH / 82801GBM ICH7-M	Intel 82910GMLE GMCH/82801FBM ICH6-M	Intel® 945GSE / ICH7-M
I/O Chip	Winbond W83627HG-AW	Winbond W83627HG-AW	ITE IT8712F
Memory	One 200-pin SODIMM supports up to 2 GB DDR2 400/533/667 SDRAM	One 200-pin SODIMM socket supports up to 1 GB DDR2 333/400 MHz SDRAM	One 200-pin SODIMM socket supports up to 2GB DDR2 400/533MHz SDRAM
SSD	One CompactFlash Type I/II socket (internal)		
HDD Drive Bay	1 x 2.5" SATA HDD or optional 44-pin IDE HDD		
WiFi	Optional USB WIFI 802.11 b/g (occupy one USB port)		

Rear Panel I/O			
Serial Port	1 x RS-232, 1 x RS-232/422/485		1 x RS-232, 1 x RS-232 or optional RS-422/485
Ethernet	Dual Realtek RTL8111B GigaLAN	Dual Atheros AR8121 GigaLAN	Dual Marvell 88E8053 GigaLAN
VGA	1 x DB-15		
Audio port	1 x Line out, 1 x Mic in		
USB	4 x USB 2.0	6 x USB 2.0	6 x USB 2.0
Mouse & KB	1 x PS/2 keyboard & mouse connector	n/a	n/a
Mechanical & Evironmental			
Color	Black		
Power Input	100~250 Vdc/ 47~63 Hz		
Power Output	+12 Vdc / 5 A (60W)		
Operating Temperature	0℃ to 40℃.		
Storage Temperature	-10℃ to 50℃.		
Relative Humidity	10% to 95% @ 40℃, non-condensing		
Mounting	Wall/Stand/VESA 75 mm X 75 mm		
Dimensions	300mm X 195 mm X 56 mm		
Weight	2.95 Kgs		

Panel		
	FPC-10WA1	FPC-10WV1
LCD size	10" Wide	
Display type	WSVGA TFT	
Resolution	1024x600	
Color	256K	
Pixel pitch	0.21525mm(W) x 0.21525mm(H)	
Luminance	250 cd/m²	
Contrast ratio	500	
Viewing angle	50(U), 60(D), 70(L), 70(R)	
Response time	25 ms	
Backlight	LED	
Touch Type	5-wire resistive	
Touch Light Transmission	80%	
Touch Interface	USB	
System		
Board	**ECM-LX800**	**ECM-CX700**
CPU	Onboard AMD Geode LX800 @ 0.9 W 500 MHz with 128K L2 cache	Onboard VIA Eden V4 1 GHz CPU
Cooling Method	Passive CPU heatsink	Passive CPU heatsink
System Chipset	AMD Geode LX800/CS5536	VIA CX700M
I/O Chip	Winbond W83627HG-AW	VIA VT1211
Memory	One 200-pin SODIMM socket supports up to 1 GB DDR 333/400 SDRAM	One 200-pin DDR2 SODIMM socket supports up to 1 GB DDR2 400/533 SDRAM
SSD	One CompactFlash Type I/II socket (internal)	
HDD Drive Bay	1 x 2.5" SATA HDD or optional 44-pin IDE HDD	
WiFi	Optional USB WIFI 802.11 b/g (occupy one USB port)	

Rear Panel I/O		
Serial Port	1 x RS-232, 1 x RS-232 or optional RS-422/485	1 x RS-232, 1 x RS-232/422/485
Ethernet	Dual Realtek RTL8101L LAN	Dual Realtek RTL8101L LAN
VGA	1 x DB-15	
Audio port	1 x Line out, 1 x Mic in	
USB	4 x USB 2.0	
Mouse & KB	1 x PS/2 keyboard & mouse connector	
Mechanical & Evironmental		
Color	Black	
Power Input	100~250 Vdc/ 47~63 Hz	
Power Output	+12 Vdc / 5 A (60W)	
Operating Temperature	0℃ to 40℃.	
Storage Temperature	-10℃ to 50℃.	
Relative Humidity	10% to 95% @ 40℃, non-condensing	
Mounting	Wall/Stand/VESA 75 mm X 75 mm	
Dimensions	300mm X 195 mm X 56 mm	
Weight	2.95 Kgs	

Panel			
	FPC-13W01	FPC-13W03	FPC-13W04
LCD size	13" Wide		
Display type	WXGA TFT		
Resolution	1280 x 800		
Color	262K		
Pixel pitch	0.2235mm(W) x 0.2235mm(H)		
Luminance	250 cd/m²		
Contrast ratio	500		
Viewing angle	20(U), 45(D), 45(L), 45(R)		
Response time	10 ms		
Backlight	1 x CCFL		
Touch Type	5-wire resistive		
Touch Light Transmission	80%		
Touch Interface	USB		
System			
Board	ECM-945GM	ECM-910	ECM-945GSE
CPU	Supports 65nm Intel® µFC-PGA 478 / µFC-BGA 479 Core™ Duo / Core™ 2 Duo / Celeron® M	Onboard Intel® Celeron M 600MHz with 512K L2 Cache or Intel® µFC-PGA 478 / µFC-BGA 479 Celeron® M CPU	Intel® Atom processor N270 1.6GHz CPU
Cooling Method	Active CPU cooler	Passive CPU heatsink	Passive CPU heatsink
System Chipset	Intel®82945GME GMCH / 82801GBM ICH7-M	Intel 82910GMLE GMCH/82801FBM ICH6-M	Intel® 945GSE / ICH7-M
I/O Chip	Winbond W83627HG-AW	Winbond W83627HG-AW	ITE IT8712F
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SSD	One CompactFlash Type I/II socket (internal)		
HDD Drive Bay	1 x 2.5" SATA HDD or optional 44-pin IDE HDD		
WiFi	Optional USB WIFI 802.11 b/g (occupy one USB port)		

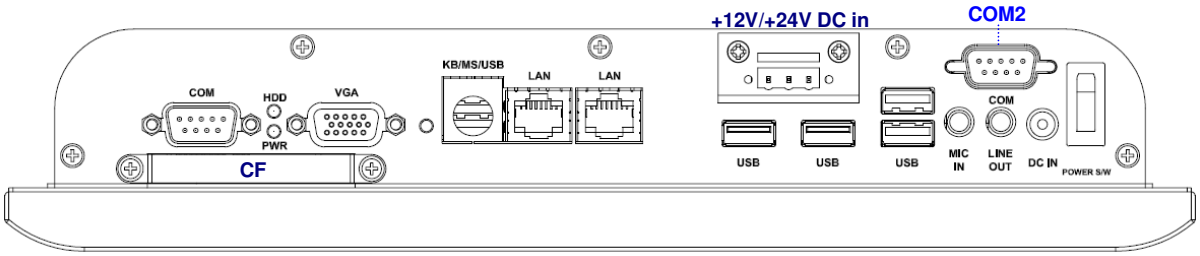
Rear Panel I/O			
Serial Port	1 x RS-232, 1 x RS-232/422/485		1 x RS-232, 1 x RS-232 or optional RS-422/485
Ethernet	Dual Realtek RTL8111B GigaLAN	Dual Atheros AR8121 GigaLAN	Dual Marvell 88E8053 GigaLAN
VGA	1 x DB-15		
Audio port	1 x Line out, 1 x Mic in		
USB	4 x USB 2.0	6 x USB 2.0	6 x USB 2.0
Mouse & KB	1 x PS/2 keyboard & mouse connector	n/a	n/a
Mechanical & Evironmental			
Color	Black		
Power Input	100~250 Vdc/ 47~63 Hz		
Power Output	+12 Vdc / 5 A (60W)		
Operating Temperature	0℃ to 40℃.		
Storage Temperature	-10℃ to 50℃.		
Relative Humidity	10% to 95% @ 40℃, non-condensing		
Mounting	Wall/Stand/VESA 75 mm X 75 mm		
Dimensions	364 mm X 246 mm X 56 mm		
Weight	3.57 Kgs		

Panel		
	FPC-13WA1	FPC-13WV1
LCD size	13" Wide	
Display type	WXGA TFT	
Resolution	1280 x 800	
Color	262K	
Pixel pitch	0.2235mm(W) x 0.2235mm(H)	
Luminance	250 cd/m²	
Contrast ratio	500	
Viewing angle	20(U), 45(D), 45(L), 45(R)	
Response time	10 ms	
Backlight	1 x CCFL	
Touch Type	5-wire resistive	
Touch Light Transmission	80%	
Touch Interface	USB	
System		
Board	**ECM-LX800**	**ECM-CX700**
CPU	Onboard AMD Geode LX800 @ 0.9 W 500 MHz with 128K L2 cache	Onboard VIA Eden V4 1 GHz CPU
Cooling Method	Passive CPU heatsink	Passive CPU heatsink
System Chipset	AMD Geode LX800/CS5536	VIA CX700M
I/O Chip	Winbond W83627HG-AW	VIA VT1211
Memory	One 200-pin SODIMM socket supports up to 1 GB DDR 333/400 SDRAM	One 200-pin DDR2 SODIMM socket supports up to 1 GB DDR2 400/533 SDRAM
SSD	One CompactFlash Type I/II socket (internal)	
HDD Drive Bay	1 x 2.5" SATA HDD or optional 44-pin IDE HDD	
WiFi	Optional USB WIFI 802.11 b/g (occupy one USB port)	

Rear Panel I/O		
Serial Port	1 x RS-232, 1 x RS-232 or optional RS-422/485	1 x RS-232, 1 x RS-232/422/485
Ethernet	Dual Realtek RTL8101L LAN	Dual Realtek RTL8101L LAN
VGA	1 x DB-15	
Audio port	1 x Line out, 1 x Mic in	
USB	4 x USB 2.0	
Mouse & KB	1 x PS/2 keyboard & mouse connector	
Mechanical & Evironmental		
Color	Black	
Power Input	100~250 Vdc/ 47~63 Hz	
Power Output	+12 Vdc / 5 A (60W)	
Operating Temperature	0℃ to 40℃.	
Storage Temperature	-10℃ to 50℃.	
Relative Humidity	10% to 95% @ 40℃, non-condensing	
Mounting	Wall/Stand/VESA 75 mm X 75 mm	
Dimensions	364 mm X 246 mm X 56 mm	
Weight	3.57 Kgs	

1.4 System Overview

1.4.1 Rear View



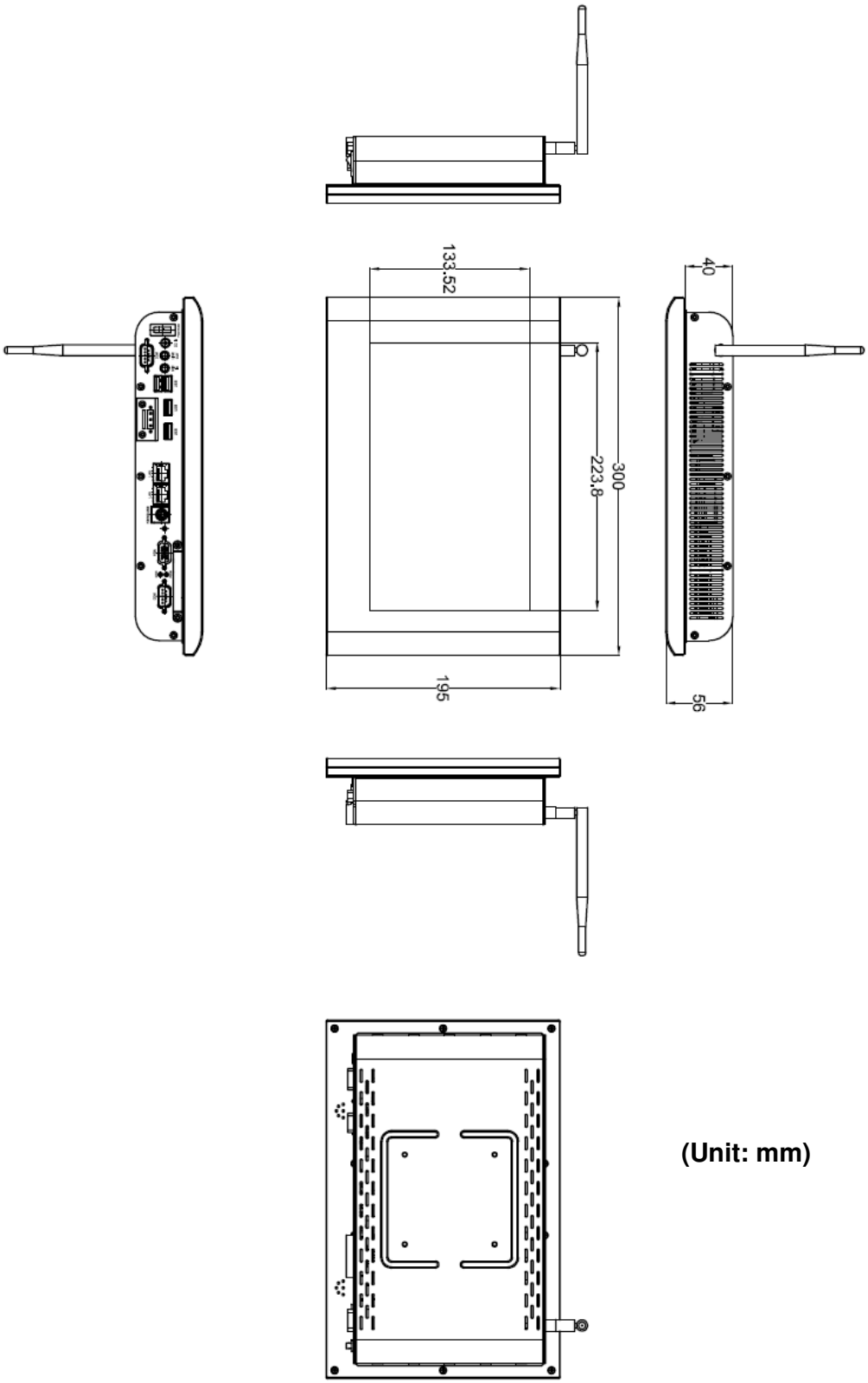
Connectors

Label	Function	Note
CF	CompactFlash Type I/II socket with cover	
COM	Serial port 1 & 2 (Optional RS-422/485 for COM2)	DB-9 male connector
DC in	+12V (optional +24V) DC-in power connector	
HDD	HDD LED	
KB/MS/USB	PS/2 keyboard & mouse connector (FPC-10W01/V1/A1, FPC-13W01/V1/A1) 2 x USB connector (FPC-10W03/04, FPC-13W03/04)	6-pin Mini DIN or dual USB decks
LAN	Ethernet connector	RJ-45
LINE OUT	Line-out audio jack	
Mic In	Mic-in audio jack	
Power S/W	Power switch	
PWR	Power LED	
USB	USB 2.0 connector	
VGA	CRT connector	DB-15 female connector
24V DC in	+12V/+24V DC in connector (Optional)	

Note: 1. Either RS-232 or RS-422/485 for COM2 of FPC-10W04, 10WA1, 13W04, 13WA1 only.

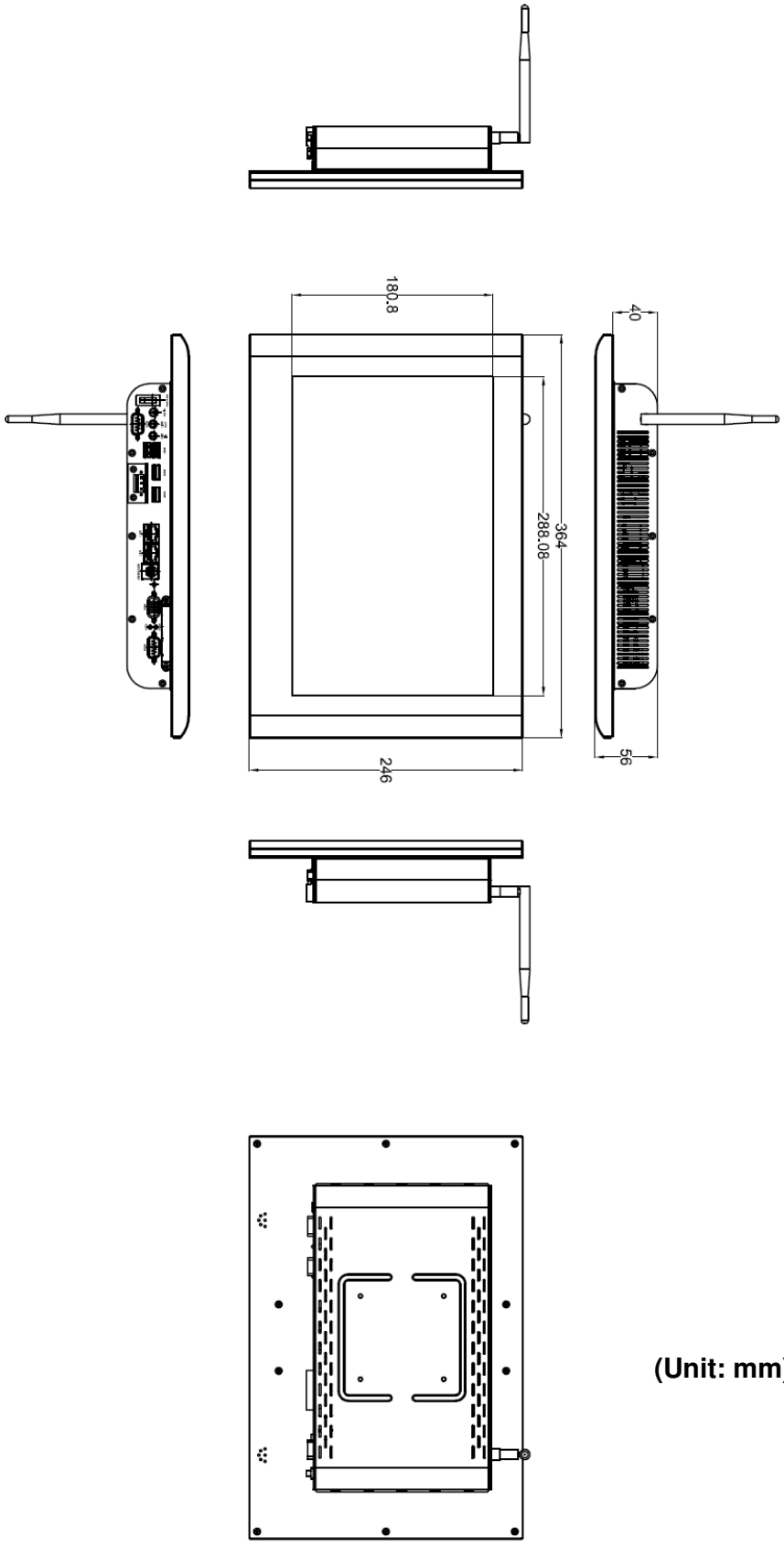
1.5 System Dimensions

1.5.1 FPC-10W Series



(Unit: mm)

1.5.2 FPC-13W Series



(Unit: mm)

2. Hardware Configuration

2.1 Jumper and Connector Setting, Driver and BIOS Installing

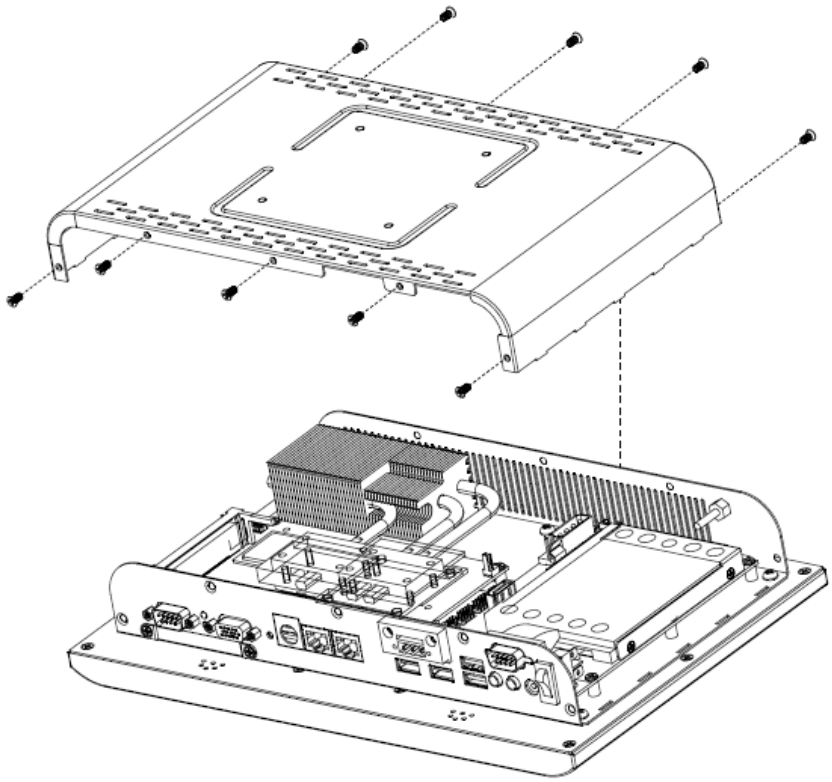
- Please refer to ECM-945GM, ECM-910, ECM-945GSE, ECM-LX800, ECM-CX700 Quick Installation Guide or User's Manual for further information.

Note: If you need more information, please visit our website:

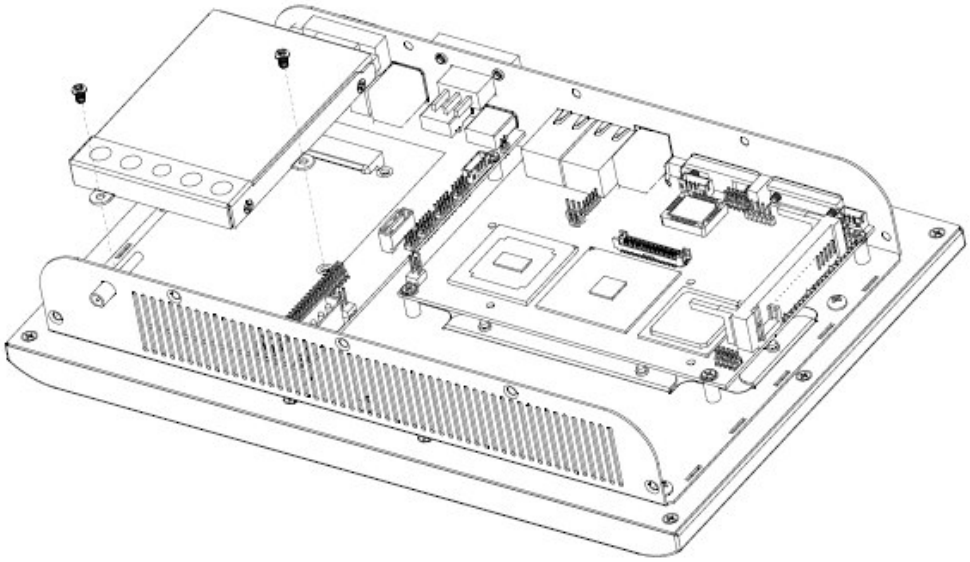
http://www.avalue.com.tw

2.2 Installing Hard Disk & Memory

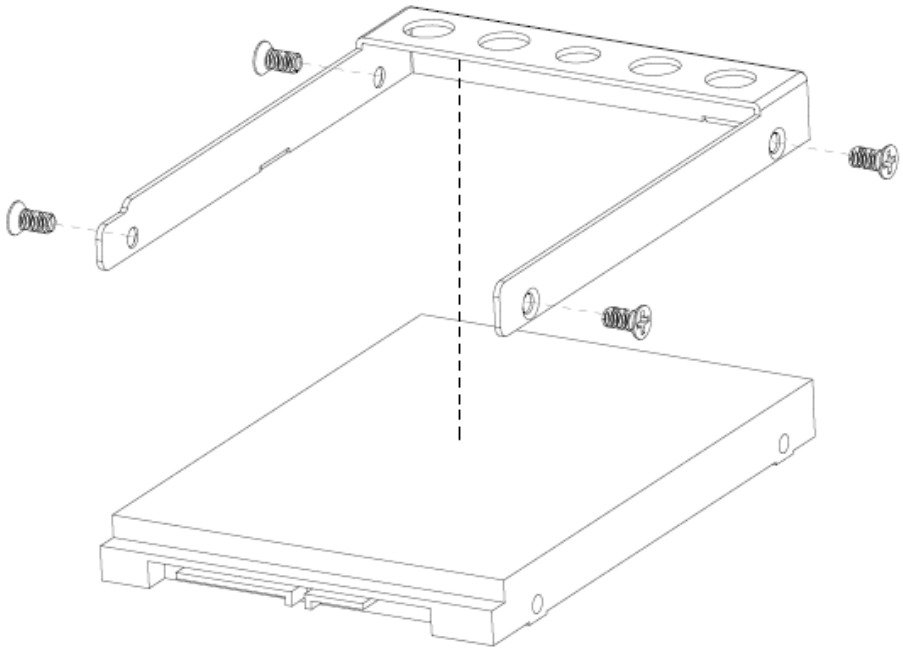
2.2.1 Install 2.5” HDD



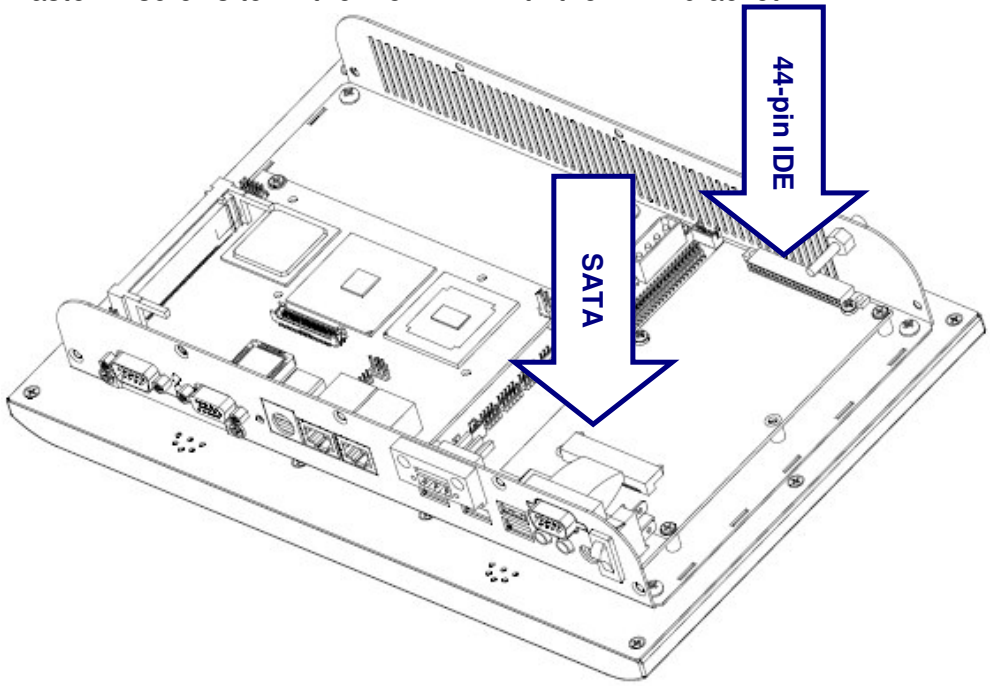
Step 1. Unfasten 10 screws as above to remove the bottom chassis.



Step 2. Unlock 2 screws of the HDD bracket as indicated.



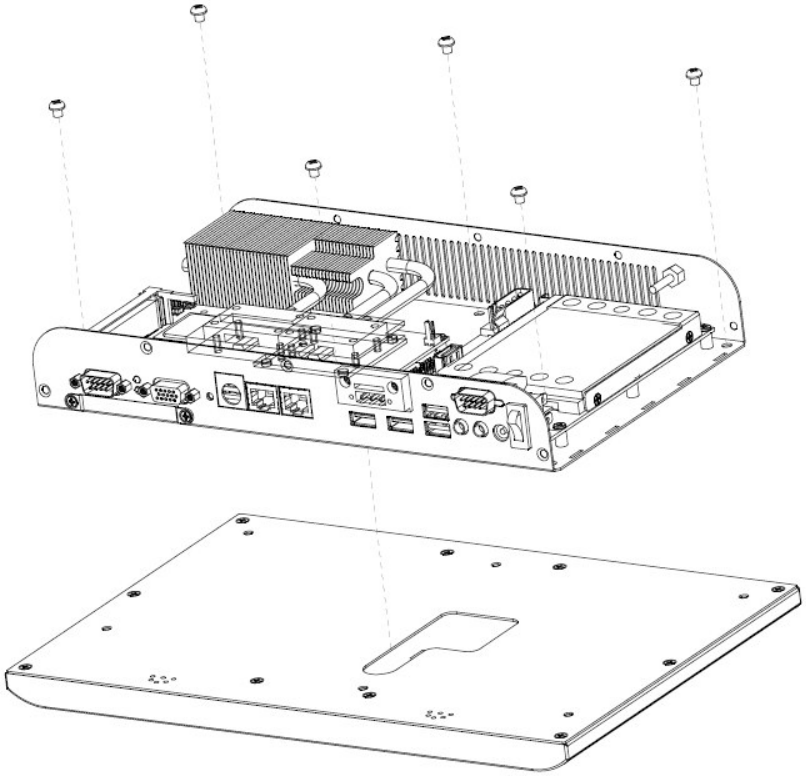
Step 3. Fasten 4 screws to fix the 2.5” HDD with the HDD bracket



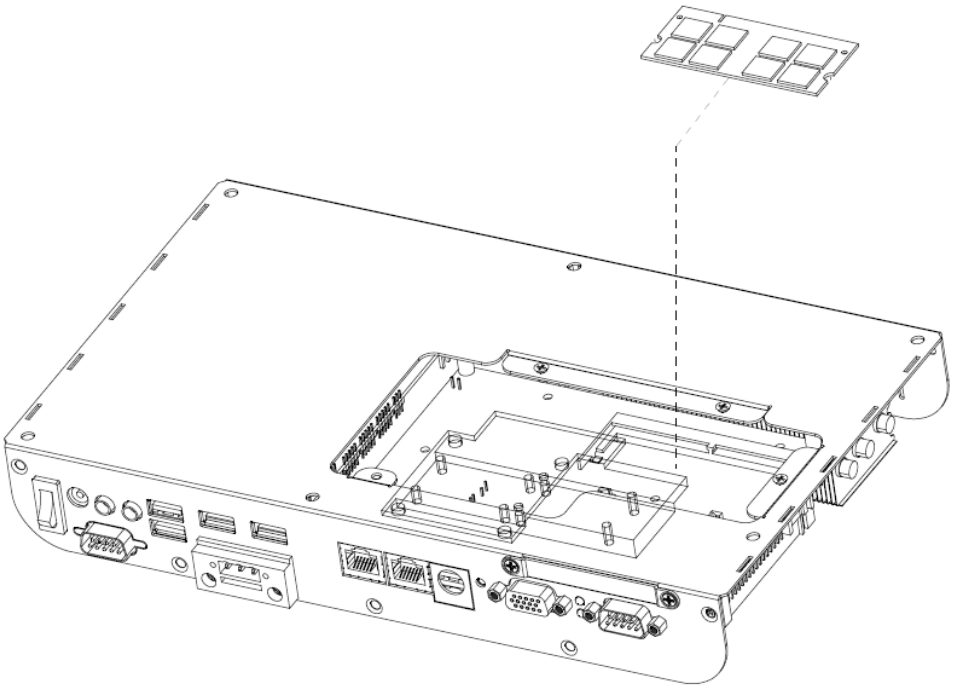
Step 4. Place and plug the HDD assembled to the HDD connector (either one of SATA or IDE) and fix the HDD with 2 screws as indicated on **Step 2**.

Note: There’s only one HDD connector the board and the default is SATA.

2.3 Installing System Memory

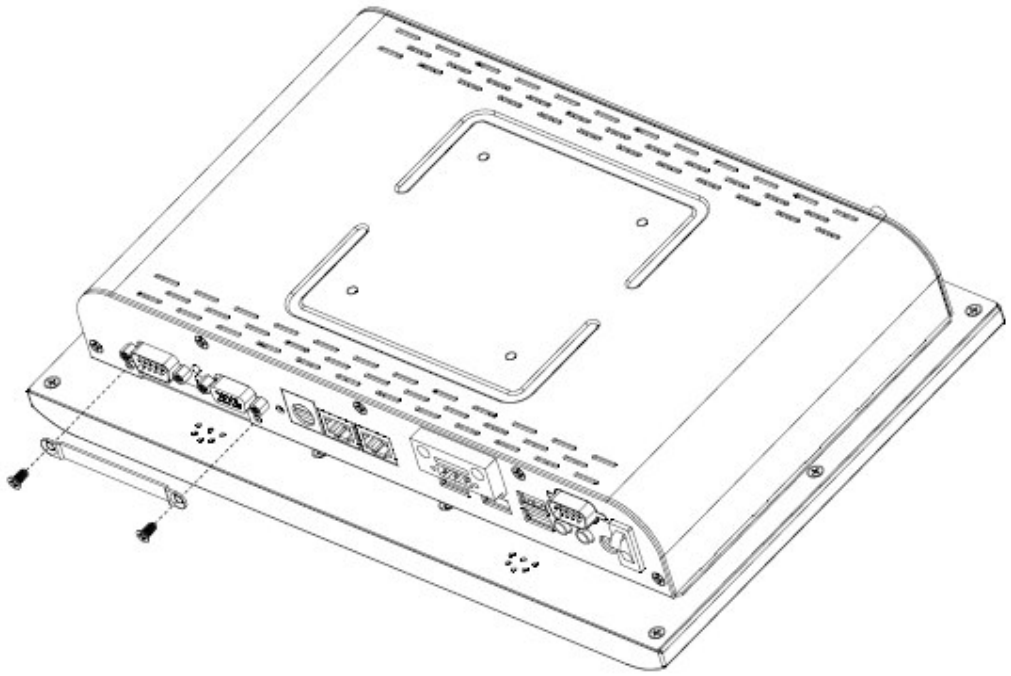


Step 1. Remove 6 screws as above and have the front panel and box pc separated.

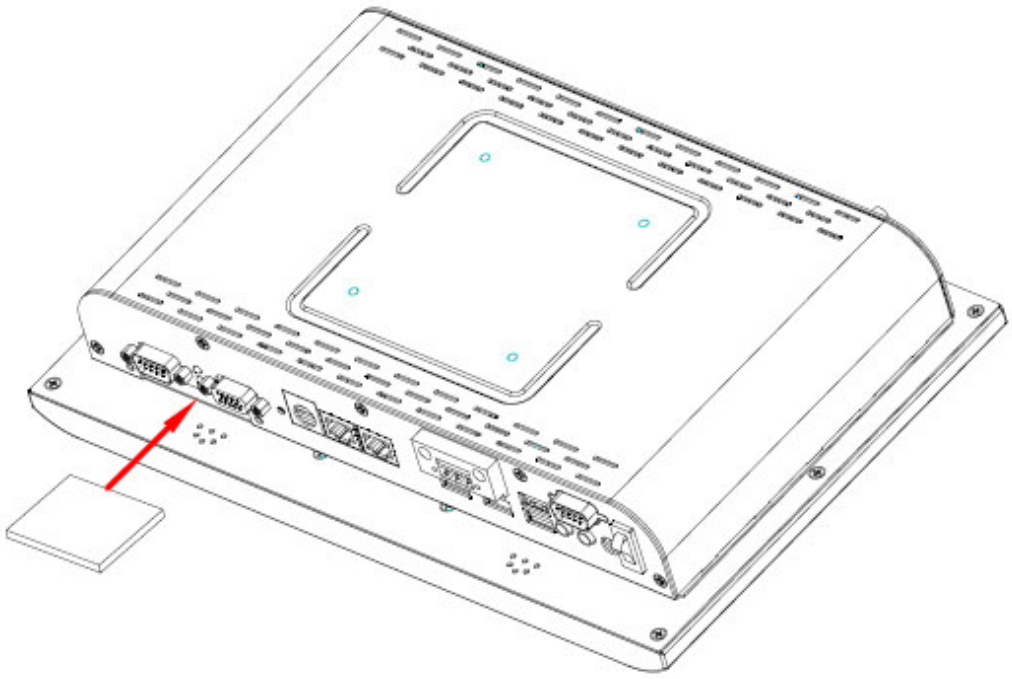


Step 2. Install the system RAM as shown above.

2.4 Installing CF Card



Step 1. Unlock 2 screws from the rear side of the panel PC as above.



Step 2. Put the CF card into the socket and fasten 2 screws back.